

### **REMARKS**

Applicant thanks the Examiner for the thorough consideration given the present application.

Claims 1-22 are now present in this application. Claims 1-3, 12, 20, 21 and 22 are independent.

Reconsideration of this application is respectfully requested.

#### **Allowed Claims**

Applicant acknowledges with appreciation the indication that claims 1, 4-7, 10, 11 and 14-19 are allowed.

#### **Rejection under 35 U.S.C. §102**

Claims 2, 3, 8, 9, 12, 13, and 20-22 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,448,579 to Lim et al. (hereinafter, "Lim"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

A prior art reference anticipates the subject of a claim when the reference discloses every feature of the claimed invention, either explicitly or inherently (*see In re Paulsen*, 30 F.3d 1475, 1478, 1479, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994), *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990), *Hazani v. Int'l Trade Comm'n*, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997) and *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent.

Claim 2 recites a combination of features including that the gate line is connected to the

capacitor electrode by “a contact hole passing through said at least two storage capacitors.” Lim does not disclose a contact hole passing through two storage capacitors, as recited. Instead, Lim actually discloses one gate contact hole 209 passing through one storage capacitor M and a separate, distinct gate contact hole 211 passing through another storage capacitor N.

Accordingly, Lim does not anticipate claim 2.

Similar comments apply to claims 3, 20 and 21, which also recite “a contact hole passing through said at least two storage capacitors.”

Accordingly, Lim does not anticipate claim 3 (or claims 8 and 9 that depend from claim 3), 20 or 21. Furthermore, with respect to claim 21, Lim does not disclose that the capacitor electrode 216 is the uppermost electrode, as recited.

In response to these previously presented arguments, the outstanding Office Action states “Applicant argues that a single contact hole should pass through the two storage capacitors. However, the term ‘single contact hole’ is not listed in the claim.”

Applicants respectfully submit that this rejection is improper for the following reasons.

Applicants clearly disclose two contact holes, e.g., 56b and 56c, each of which passes through at least two storage capacitors, as shown, for example, in Figs. 5 and 8E. Accordingly, Applicants have no intention of limiting “a contact hole” to a single contact hole, but do contend that any contact hole that is being claimed is a contact hole that passes through at least two storage capacitors. This interpretation of the claims is clear from the disclosure, which discloses this positively recited feature, and from the prosecution history, which clearly argues this feature.

Moreover, this claim interpretation is consistent with case law, which indicates that, the word “a” generally means “one or more” in open-ended claims containing the transitional phrase “comprising,” *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 [55 USPQ2d 1835] (Fed. Cir. 2000). See, also, *Norion Corp. v. Stryker Corp.*, 77 USPQ2d 1242 (Fed. Cir. 2005).

With this conventional interpretation in mind, it is clear that by reciting “said gate line being connected via a contact hole passing through said at least two storage capacitors, to the capacitor electrode,” case law requires that this language be read as “said gate line being

connected via at least one contact hole passing through said at least two storage capacitors, to the capacitor electrode.”

This means that any contact hole covered by these claims passes through said at least two storage capacitors, which is a positively recited feature that is not disclosed by Lim.

Thus, this interpretation is completely consistent with case law, as set forth above, and with the specification, as set forth above, and with the prosecution history of this Application, which shows that Applicants have consistently included the feature in issue in the claims and have argued that it is patentably distinct from the applied art.

Accordingly, based on Federal Circuit case law claim interpretation principles, and the explicit disclosure and prosecution history of this Application, claims 2, 3, 8, 9, 12, 13 and 20-22 should interpreted such that they are not anticipated by Lim.

As an alternative, with respect to dependent claims 8 and 9, the outstanding Office Action states that “capacitor electrode 216 is the uppermost electrode.” Applicant respectfully submits that this statement overlooks the entire claim. While Lim does disclose that its pixel electrode 218 is the second capacitor electrode (col. 7, lines 56-57), Lim’s first capacitor electrode is a combination of gate line 206 and electrode 216. In this regard, Lim explicitly discloses, in col. 7, lines 53-56 that “gate line 206 and the first capacitor electrode 216, which are electrically connected by the electrode connecting layer 219, act as a first capacitor electrode of a storage capacitor.”

Claim 8 depends on claim 3 and claim 8’s recitation of a pixel electrode is in addition to what is already recited in claim 3, i.e., at least two storage capacitors disposed between a gate line and a storage electrode formed above the gate line, said gate line being connected, via a contact hole passing through said at least two storage capacitors, to the capacitor electrode. Lim’s pixel electrode cannot be both a storage capacitor electrode recited in claim 3 and an additional pixel electrode recited in claim 8 (separate and apart from the storage capacitors recited in claim 3).

With respect to independent claim 12 and its dependent claim 13, Lim does not disclose the separately recited steps of forming a storage electrode on the gate insulating film to overlap

the gate line, forming a protective layer made of an insulating material on the gate insulating material, and forming a capacitor electrode electrically contacting the gate line on the protective layer that is made of an insulating material. Instead, Lim discloses forming a semiconductor layer 215 on the gate protection layer 214, and forming a separate capacitor electrode 216 on semiconductor layer 212.

Further, with respect to independent claim 22's positive recitation of a combination of features including at least two storage capacitors disposed vertically above one another between a gate line and a capacitor electrode formed above the gate line, said gate line being connected, via a contact hole passing through said at least two storage capacitors, to the capacitor electrode, Applicant respectfully submits that Lim does not disclose this vertical above one another two storage capacitor disposition feature. In fact, Lim's storage capacitors M and N are disposed in side-by-side relationship.

Accordingly, the office Action does not make out a *prima facie* case of unpatentability of the invention recited in claims 2, 3, 8, 9, 12, 13 and 20-22.

Reconsideration and withdrawal of this rejection of claims 2, 3, 8, 9, 12, 13 and 20-22 are respectfully requested.

### **Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejection of claims 2, 3, 8, 9, 12, 13, and 20-22 be withdrawn, and that such claims be allowed along with already allowed claims 1, 4-7, 10, 11 and 14-19. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Response is respectfully requested.

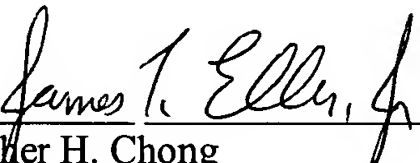
Application No.: 10/024,178  
Art Unit 2826

Attorney Docket No. 2658-0277P  
Reply to June 8, 2006 Office Action  
Page 6

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: September 8, 2006

By  #39,538  
for Esther H. Chong  
Registration No. 40,953  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Rd., Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000

EHC/RJW/mmi/cdr